

PATENT COOPERATION TREATY

2

PCT

From the INTERNATIONAL BUREAU

NOTIFICATION OF THE RECORDING
OF A CHANGE(PCT Rule 92bis.1 and
Administrative Instructions, Section 422)

To:

ROYSTONS
Tower Building
Water Street
Liverpool
Merseyside L3 1BA
ROYAUME-UNIDate of mailing (day/month/year)
02 October 2000 (02.10.00)Applicant's or agent's file reference
SMC/RC/P4126

IMPORTANT NOTIFICATION

International application No.
PCT/GB98/03140International filing date (day/month/year)
21 October 1998 (21.10.98)

1. The following indications appeared on record concerning:

☒ the applicant ☐ the inventor ☐ the agent ☐ the common representative

Name and Address

DANMERE LIMITED
Whitehall
75 School Lane
Hartford
Northwich
Cheshire CW8 1PF
United Kingdom

State of Nationality

GB

State of Residence

GB

Telephone No.

Facsimile No.

Teleprinter No.

2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning:

☐ the person ☒ the name ☒ the address ☐ the nationality ☐ the residence

Name and Address

4TV LIMITED
4TV House
13-15 Winnington Street
Northwich
Cheshire CW8 1AQ
United Kingdom

State of Nationality

GB

State of Residence

GB

Telephone No.

Facsimile No.

Teleprinter No.

3. Further observations, if necessary:

Please also note the correct reference number, as indicated above.

4. A copy of this notification has been sent to:

☒ the receiving Office ☐ the designated Offices concerned
☐ the International Searching Authority ☒ the elected Offices concerned
☒ the International Preliminary Examining Authority ☐ other:The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Authorized officer

Simin Baharlou

Facsimile No.: (41-22) 740.14.35

Telephone No.: (41-22) 338.83.38

PATENT COOPERATION TREATY

2

PCT

NOTIFICATION OF THE RECORDING
OF A CHANGE(PCT Rule 92bis.1 and
Administrative Instructions, Section 422)

From the INTERNATIONAL BUREAU

To:

ROYSTONS
Tower Building
Water Street
Liverpool
Merseyside L3 1BA
ROYAUME-UNI

Date of mailing (day/month/year) 17 August 2000 (17.08.00)	IMPORTANT NOTIFICATION
Applicant's or agent's file reference SMC/LF/P4126	
International application No. PCT/GB98/03140	International filing date (day/month/year) 21 October 1998 (21.10.98)

1. The following indications appeared on record concerning:

☒ the applicant ☐ the inventor ☐ the agent ☐ the common representative

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United Kingdom

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State of Residence

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☐ the person ☒ the name ☒ the address ☐ the nationality ☐ the residence

Name and Address

4TV LIMITED
4TV House
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Northwich
Cheshire CW8 1AQ
United Kingdom

State of Nationality

GB

State of Residence

GB

Telephone No.

Facsimile No.

Teleprinter No.

3. Further observations, if necessary:

4. A copy of this notification has been sent to:

<input checked="" type="checkbox"/> the receiving Office	<input type="checkbox"/> the designated Offices concerned
<input type="checkbox"/> the International Searching Authority	<input checked="" type="checkbox"/> the elected Offices concerned
<input checked="" type="checkbox"/> the International Preliminary Examining Authority	<input type="checkbox"/> other:

The International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20, Switzerland

Facsimile No.: (41-22) 740.14.35

Authorized officer

A. Karkachi

Telephone No.: (41-22) 338.83.38

PATENT COOPERATION TREATY

2

PCT

NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Assistant Commissioner for Patents
United States Patent and Trademark
Office
Box PCT
Washington, D.C.20231
ETATS-UNIS D'AMERIQUE

in its capacity as elected Office

Date of mailing (day/month/year) 17 April 2000 (17.04.00)	
International application No. PCT/GB98/03140	Applicant's or agent's file reference SMC/LF/P4126
International filing date (day/month/year) 21 October 1998 (21.10.98)	Priority date (day/month/year) 11 August 1998 (11.08.98)
Applicant AUSTIN, Kenneth	

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:

07 March 2000 (07.03.00)

☐ in a notice effecting later election filed with the International Bureau on:2. The election ☒ was☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No.: (41-22) 740.14.35	Authorized officer S. Mafla Telephone No.: (41-22) 338.83.38
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PATENT COOPERATION TREATY

FILE.

PCT

INFORMATION CONCERNING ELECTED
OFFICES NOTIFIED OF THEIR ELECTION

(PCT Rule 61.3)

From the INTERNATIONAL BUREAU

To:

ROYSTONS
Tower Building
Water Street
Liverpool
Merseyside L3 1BA
ROYAUME-UNI

Date of mailing (day/month/year) 17 April 2000 (17.04.00)		
Applicant's or agent's file reference SMC/LF/P4126		IMPORTANT INFORMATION
International application No. PCT/GB98/03140	International filing date (day/month/year) 21 October 1998 (21.10.98)	
Priority date (day/month/year) 11 August 1998 (11.08.98)		
Applicant DANMERE LIMITED et al		

1. The applicant is hereby informed that the International Bureau has, according to Article 31(7), notified each of the following Offices of its election:

AP : GH, GM, KE, LS, MW, SD, SZ, UG, ZW

EP : AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE

National : AU, BG, BR, CA, CN, CZ, DE, IL, JP, KP, KR, MN, NO, NZ, PL, RO, RU, SE, SK, US

2. The following Offices have waived the requirement for the notification of their election; the notification will be sent to them by the International Bureau only upon their request:

EA : AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

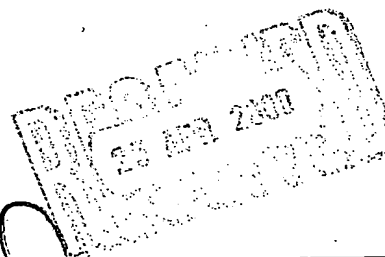
OA : BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

National : AL, AM, AT, AZ, BA, BB, BY, CH, CU, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID,
IS, KE, KG, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MW, MX, PT, SD, SG, SI, SL, TJ, TM, TR,
TT, UA, UG, UZ, VN, YU, ZW

3. The applicant is reminded that he must enter the "national phase" before the expiration of 30 months from the priority date before each of the Offices listed above. This must be done by paying the national fee(s) and furnishing, if prescribed, a translation of the international application (Article 39(1)(a)), as well as, where applicable, by furnishing a translation of any annexes of the international preliminary examination report (Article 36(3)(b) and Rule 74.1).

Some offices have fixed time limits expiring later than the above-mentioned time limit. For detailed information about the applicable time limits and the acts to be performed upon entry into the national phase before a particular Office, see Volume II of the PCT Applicant's Guide.

The entry into the European regional phase is postponed until 31 months from the priority date for all States designated for the purposes of obtaining a European patent.



The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. (41-22) 740.14.35	Authorized officer: S. Mafla Telephone No. (41-22) 338.83.38
--	--

INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB 98/03140

A. CLASSIFICATION OF SUBJECT MATTER

IPC 6 H04N5/445 H04N5/775 H04N7/173 H04N5/00 H04N5/44

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 H04N G10H

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 233 422 A (FUJIMORI YASUHIRO ET AL) 3 August 1993 see abstract see column 3, line 9 - column 4, line 20; figures 1-3 ---	1-4
X	US 4 528 585 A (BOLGER THOMAS V) 9 July 1985 see column 1, line 1 - line 49 see column 2, line 5 - line 49; figure 1 ---	1-5
X	PATENT ABSTRACTS OF JAPAN vol. 097, no. 010, 31 October 1997 & JP 09 163260 A (SONY CORP), 20 June 1997 see abstract --- -/-	1-3

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier document but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

25 June 1999

Date of mailing of the international search report

19. 07. 99

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Fuchs, P

INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB 98/03140

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	PATENT ABSTRACTS OF JAPAN vol. 098, no. 010, 31 August 1998 & JP 10 133643 A (SHIMADZU CORP), 22 May 1998 see abstract ---	1-5
Y	PATENT ABSTRACTS OF JAPAN vol. 017, no. 331 (E-1386), 23 June 1993 & JP 05 037873 A (SANYO ELECTRIC CO LTD), 12 February 1993 see abstract ---	1-5
Y	PATENT ABSTRACTS OF JAPAN vol. 017, no. 380 (E-1399), 16 July 1993 & JP 05 064161 A (HITACHI LTD; OTHERS: 01), 12 March 1993 see abstract ---	1-4
A	WO 91 19378 A (THOMSON CONSUMER ELECTRONICS) 12 December 1991 see the whole document ---	1-4
A	PATENT ABSTRACTS OF JAPAN vol. 011, no. 007 (E-469), 9 January 1987 & JP 61 182381 A (MATSUSHITA ELECTRIC IND CO LTD), 15 August 1986 see abstract ---	1,4
A	GB 2 305 325 A (HYUNDAI ELECTRONICS AMERICA ; ODEUM MICROSYSTEMS INC (US)) 2 April 1997 see the whole document ---	1-5
A	DE 21 33 066 A (BOSCH FERNSEHANLAGEN) 11 January 1973 ---	
X	WO 97 48230 A (STARSIGHT TELECAST INC) 18 December 1997 see page 2, line 10 - page 3, line 11 see page 6, line 13 - line 24; figure 1 see page 16, line 16 - page 23, line 29; figures 7-12 ---	17-20, 24,29, 31-33
A	US 5 223 924 A (STRUBBE HUGO J) 29 June 1993 see column 1, line 55 - column 2, line 15; figures 1-5 see column 5, line 33 - column 6, line 33 ---	17-19, 22,24, 31-34

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INTERNATIONAL SEARCH REPORT

Int: International Application No

PCT/GB 98/03140

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 410 344 A (BARKER ALVA C ET AL) 25 April 1995 see column 1, line 67 - column 2, line 40 see column 4, line 22 - line 51; figure 2 see column 7, line 55 - line 65 ---	17-19, 31,32,34
A	US 5 697 079 A (SPIVEY RONNY) 9 December 1997 see abstract see column 1, line 44 - column 2, line 20; figures 1,5 ---	35,36
A	PATENT ABSTRACTS OF JAPAN vol. 009, no. 115 (E-315), 18 May 1985 & JP 60 005686 A (MATSUSHITA DENKI SANGYO KK), 12 January 1985 see abstract ---	35,38
A	PATENT ABSTRACTS OF JAPAN vol. 097, no. 005, 30 May 1997 & JP 09 016800 A (FUJI ELECTRIC CO LTD), 17 January 1997 see abstract ---	35,39,40
A	FR 2 712 714 A (BOULAY JEAN MARIE) 24 May 1995 see the whole document ---	35
X	WO 97 49242 A (HUNWICH KEITH ;SCHEIN STEVEN (US); ALBA THERESA (US); FOLKER DAVID) 24 December 1997 see page 9, line 24 - page 10, line 29 A see page 19, line 21 - page 20, line 6; claims 1,7,21; figure 4A ---	42,43, 48,63
X	US 5 233 423 A (JERNIGAN FOREST E ET AL) 3 August 1993 A see column 1, line 29 - column 2, line 15; figures 1-2E ---	42,43, 45,63,64 47,48, 51,59,61
X	FR 2 726 717 A (LACROSSE PHILIPPE) 10 May 1996 A see page 4, line 1 - page 5, line 25; figures 1,2 see page 2, line 27 - page 3, line 17 ---	42,43, 45,47, 48,59,63 49,51
A	EP 0 785 675 A (TOKYO SHIBAURA ELECTRIC CO) 23 July 1997 see abstract; figure 1 ---	69
A	EP 0 726 574 A (MATSUSHITA ELECTRIC IND CO LTD) 14 August 1996 see column 1, line 1 - line 51; figure 16 ---	69

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB 98/03140

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>PATENT ABSTRACTS OF JAPAN vol. 097, no. 011, 28 November 1997 & JP 09 186969 A (VICTOR CO OF JAPAN LTD), 15 July 1997 see abstract</p> <p>-----</p>	69

INTERNATIONAL SEARCH REPORT

national application No.

PCT/GB 98/ 03140

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:

3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.

2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. ☒ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:

1-5, 17-64, 65, 66, 67, 68, 69

4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

☐ The additional search fees were accompanied by the applicant's protest.

☒ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 1-5,65

Television control/operating system for displaying moving pictures having means for selecting and enlarging a predetermined area for display.

2. Claims: 7-12

TV receiver with a frame grabber and connection to an image printing apparatus

3. Claims: 13-16

System for taking a copy of images displayed on a television receiver

4. Claims: 17-34,66

System for selection of programmes and storing viewing preferences.

5. Claims: 35-41,67

System for storing audio notes while using a television receiver.

6. Claims: 42-64,68

System for displaying and selecting commercials on a television receiver (teleshopping).

7. Claim : 69

System for recording a digitally transmitted television signal on an analogue cassette recorder.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/GB 98/03140

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5233422 A	03-08-1993	JP 4167685 A	15-06-1992
		DE 69117132 D	28-03-1996
		DE 69117132 T	04-07-1996
		EP 0482944 A	29-04-1992
US 4528585 A	09-07-1985	NONE	
WO 9119378 A	12-12-1991	AU 7907391 A	31-12-1991
		AU 7909591 A	31-12-1991
		AU 7960791 A	31-12-1991
		AU 7983391 A	31-12-1991
		AU 7996791 A	31-12-1991
		AU 8059091 A	31-12-1991
		AU 8064391 A	31-12-1991
		AU 8072591 A	31-12-1991
		AU 8076891 A	31-12-1991
		AU 8083991 A	31-12-1991
		AU 8084591 A	31-12-1991
		AU 8087191 A	31-12-1991
		AU 8185891 A	31-12-1991
		AU 8186091 A	31-12-1991
		AU 8211591 A	31-12-1991
		CA 2082260 A	02-12-1991
		CN 1057146 A	18-12-1991
		CN 1057139 A, B	18-12-1991
		CN 1057147 A	18-12-1991
		CN 1057148 A	18-12-1991
		CN 1057150 A, B	18-12-1991
		CN 1057144 A, B	18-12-1991
		CN 1057372 A, B	25-12-1991
		CN 1057140 A, B	18-12-1991
		CN 1057141 A, B	18-12-1991
		CN 1057373 A, B	25-12-1991
		CN 1057143 A, B	18-12-1991
		CN 1057560 A	01-01-1992
		CN 1057142 A, B	18-12-1991
		CN 1057149 A, B	18-12-1991
		CN 1057138 A, B	18-12-1991
		DE 4191157 C	13-06-1996
		DE 4191157 T	07-10-1993
		DE 4191166 T	01-04-1993
		DE 69125834 D	28-05-1997
		DE 69125834 T	31-07-1997
		DE 69125936 D	05-06-1997
		DE 69125936 T	21-08-1997
		DE 69126665 D	31-07-1997
		DE 69126665 T	11-12-1997
		DE 69127193 D	11-09-1997
		DE 69127193 T	18-12-1997
		DE 69127194 D	11-09-1997
		DE 69127194 T	18-12-1997
		DE 69127286 D	18-09-1997
		DE 69127286 T	02-01-1998
		DE 69127897 D	13-11-1997
		DE 69127897 T	05-03-1998
		DE 69128784 D	26-02-1998
		DE 69128784 T	14-05-1998

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/GB 98/03140

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
GB 2305325 A	02-04-1997	FR 2738651 A JP 9237335 A	14-03-1997 09-09-1997
DE 2133066 A	11-01-1973	NONE	
WO 9748230 A	18-12-1997	AU 3294997 A	07-01-1998
US 5223924 A	29-06-1993	DE 69322439 D DE 69322439 T EP 0572090 A JP 6197342 A US 5469206 A US 5483278 A	21-01-1999 24-06-1999 01-12-1993 15-07-1994 21-11-1995 09-01-1996
US 5410344 A	25-04-1995	NONE	
US 5697079 A	09-12-1997	NONE	
FR 2712714 A	24-05-1995	NONE	
WO 9749242 A	24-12-1997	AU 3223097 A	07-01-1998
US 5233423 A	03-08-1993	NONE	
FR 2726717 A	10-05-1996	NONE	
EP 0785675 A	23-07-1997	JP 9200691 A CA 2195161 A	31-07-1997 17-07-1997
EP 0726574 A	14-08-1996	CN 1156942 A JP 8279273 A	13-08-1997 22-10-1996

PATENT COOPERATION TREATY

PCT

NOTIFICATION OF THE RECORDING
OF A CHANGE(PCT Rule 92bis.1 and
Administrative Instructions, Section 422)

From the INTERNATIONAL BUREAU

To:

ROYSTONS
Tower Building
Water Street
Liverpool
Merseyside L3 1BA
ROYAUME-UNI

Date of mailing (day/month/year) 02 October 2000 (02.10.00)	IMPORTANT NOTIFICATION
Applicant's or agent's file reference SMC/RC/P4126	
International application No. PCT/GB98/03140	International filing date (day/month/year) 21 October 1998 (21.10.98)

1. The following indications appeared on record concerning:

☒ the applicant ☐ the inventor ☐ the agent ☐ the common representative

Name and Address DANMERE LIMITED Whitehall 75 School Lane Hartford Northwich Cheshire CW8 1PF United Kingdom	State of Nationality GB	State of Residence GB
	Telephone No.	
	Facsimile No.	
	Teleprinter No.	

2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning:

☐ the person ☒ the name ☒ the address ☐ the nationality ☐ the residence

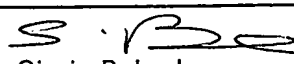
Name and Address 4TV LIMITED 4TV House 13-15 Winnington Street Northwich Cheshire CW8 1AQ United Kingdom	State of Nationality GB	State of Residence GB
	Telephone No.	
	Facsimile No.	
	Teleprinter No.	

3. Further observations, if necessary:

Please also note the correct reference number, as indicated above.

4. A copy of this notification has been sent to:

<input checked="" type="checkbox"/> the receiving Office	<input type="checkbox"/> the designated Offices concerned
<input type="checkbox"/> the International Searching Authority	<input checked="" type="checkbox"/> the elected Offices concerned
<input checked="" type="checkbox"/> the International Preliminary Examining Authority	<input type="checkbox"/> other:

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer  Simin Baharlou
Facsimile No.: (41-22) 740.14.35	Telephone No.: (41-22) 338.83.38

PATENT COOPERATION TREATY

PCT

From the INTERNATIONAL BUREAU

NOTICE INFORMING THE APPLICANT OF THE
COMMUNICATION OF THE INTERNATIONAL
APPLICATION TO THE DESIGNATED OFFICES

(PCT Rule 47.1(c), first sentence)

To:

ROYSTONS
Tower Building
Water Street
Liverpool
Merseyside L3 1BA
ROYAUME-UNI

Date of mailing (day/month/year) 24 February 2000 (24.02.00)		
Applicant's or agent's file reference SMC/LF/P4126		IMPORTANT NOTICE
International application No. PCT/GB98/03140	International filing date (day/month/year) 21 October 1998 (21.10.98)	
		Priority date (day/month/year) 11 August 1998 (11.08.98)
Applicant DANMERE LIMITED et al		

1. Notice is hereby given that the International Bureau has communicated, as provided in Article 20, the international application to the following designated Offices on the date indicated above as the date of mailing of this Notice:
AU,CN,EP,IL,JP,KP,KR,US

In accordance with Rule 47.1(c), third sentence, those Offices will accept the present Notice as conclusive evidence that the communication of the international application has duly taken place on the date of mailing indicated above and no copy of the international application is required to be furnished by the applicant to the designated Office(s).

2. The following designated Offices have waived the requirement for such a communication at this time:

AL,AM,AP,AT,AZ,BA,BB,BG,BR,BY,CA,CH,CU,CZ,DE,DK,EA,EE,ES,FI,GB,GD,GE,GH,GM,HR,HU,
ID,IS,KE,KG,KZ,LC,LK,LR,LS,LT,LU,LV,MD,MG,MK,MN,MW,MX,NO,NZ,OA,PL,PT,RO,RU,SD,SE,
SG,SI,SK,SL,TJ,TM,TR,TT,UA,UG,UZ,VN,YU,ZW

The communication will be made to those Offices only upon their request. Furthermore, those Offices do not require the applicant to furnish a copy of the international application (Rule 49.1(a-bis)).

3. Enclosed with this Notice is a copy of the international application as published by the International Bureau on
24 February 2000 (24.02.00) under No. WO 00/10327

REMINDER REGARDING CHAPTER II (Article 31(2)(a) and Rule 54.2)

If the applicant wishes to postpone entry into the national phase until 30 months (or later in some Offices) from the priority date, a demand for international preliminary examination must be filed with the competent International Preliminary Examining Authority before the expiration of 19 months from the priority date.

It is the applicant's sole responsibility to monitor the 19-month time limit.

Note that only an applicant who is a national or resident of a PCT Contracting State which is bound by Chapter II has the right to file a demand for international preliminary examination.

REMINDER REGARDING ENTRY INTO THE NATIONAL PHASE (Article 22 or 39(1))

If the applicant wishes to proceed with the international application in the national phase, he must, within 20 months or 30 months, or later in some Offices, perform the acts referred to therein before each designated or elected Office.

For further important information on the time limits and acts to be performed for entering the national phase, see the Annex to Form PCT/IB/301 (Notification of Receipt of Record Copy) and Volume II of the PCT Applicant's Guide.

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No. (41-22) 740.14.35	Authorized officer J. Zahra Telephone No. (41-22) 338.83.38
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PATENT COOPERATION TREATY

From the:
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:

ROYSTONS
Tower Building
Water Street
Liverpool, Merseyside L3 1BA
GRANDE BRETAGNE

PCT

WRITTEN OPINION

(PCT Rule 66)

Applicant's or agent's file reference SMC/LF/P4126		Date of mailing (day/month/year) 07.07.2000
International application No. PCT/GB98/03140		REPLY DUE within 3 month(s) from the above date of mailing
International filing date (day/month/year) 21/10/1998	Priority date (day/month/year) 11/08/1998	
International Patent Classification (IPC) or both national classification and IPC H04N5/445		
Applicant DANMERE LIMITED et al.		


- This written opinion is the first drawn up by this International Preliminary Examining Authority.
- This opinion contains indications relating to the following items:
 - ☒ Basis of the opinion
 - ☐ Priority
 - ☒ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - ☒ Lack of unity of invention
 - ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - ☐ Certain document cited
 - ☒ Certain defects in the international application
 - ☒ Certain observations on the international application
- The applicant is hereby invited to reply to this opinion.

When? See the time limit indicated above. The applicant may, before the expiration of that time limit, request this Authority to grant an extension, see Rule 66.2(d).

How? By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 66.3. For the form and the language of the amendments, see Rules 66.8 and 66.9.

Also: For an additional opportunity to submit amendments, see Rule 66.4.
For the examiner's obligation to consider amendments and/or arguments, see Rule 66.4 bis.
For an informal communication with the examiner, see Rule 66.6.

If no reply is filed, the international preliminary examination report will be established on the basis of this opinion.
- The final date by which the international preliminary examination report must be established according to Rule 69.2 is: **11/12/2000**.

Name and mailing address of the international preliminary examining authority:

European Patent Office
D-80298 Munich
Tel. +49 89 2399 - 0 Tx: 523656 epmu d
Fax: +49 89 2399 - 4465

Authorized officer / Examiner

Loeser, E

Formalities officer (incl. extension of time limits)
SCHALINATUS, D
Telephone No. +49 89 2399 8242



WRITTEN OPINION

International application No. PCT/GB98/03140

I. Basis of the opinion

1. This opinion has been drawn on the basis of (*substitute sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed".*):

Description, pages:

1-37 as originally filed

Claims, No.:

1-69 as originally filed

Drawings, sheets:

1-22 as originally filed

2. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

3. This opinion has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

4. Additional observations, if necessary:

III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or to be industrially applicable have not been and will not be examined in respect of:

- ☐ the entire international application,
- ☒ claims Nos. 6-16, 65-68,

because:

- ☐ the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination (*specify*):

- ☒ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. 65-68 are so unclear that no meaningful opinion could be formed (*specify*):
see separate sheet
- ☐ the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.
- ☒ no international search report has been established for the said claims Nos. 6-16.

IV. Lack of unity of invention

1. In response to the invitation (Form PCT/IPEA/405) to restrict or pay additional fees, the applicant has:
- ☐ restricted the claims.
- ☒ paid additional fees.
- ☐ paid additional fees under protest.
- ☐ neither restricted nor paid additional fees.
2. ☐ This Authority found that the requirement of unity of invention is not complied with for the following reasons and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees:
3. Consequently, the following parts of the international application were the subject of international preliminary examination in establishing this opinion:
- ☐ all parts.
- ☒ the parts relating to claims Nos. 1-5,17-64,69.

V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Claims	1-5,17,18,21,26,31-35,38,42
Inventive step (IS)	Claims	1-5,17-22,24,26-29,31-36,38-43,45-64,69
Industrial applicability (IA)	Claims	

2. Citations and explanations

see separate sheet

VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

see separate sheet

VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

1. General

a)

The application contravenes Rule 13.1 PCT because the application comprises the following plural groups of separate inventions that are not linked with each other by a common and inventive technical concept:

Group I : Claims 1-5

(Selecting an area of a displayed TV image for enlarged display);

Group II/III : Claims 7-16

(Selecting from displayed video images, capturing/storing selected images and selectively displaying images from the stored ones)

The minor differences identifiable between the independent claims of groups III and II that were established in the International Search Report do not appear to justify separating claims 7-16 into two separate groups of inventions. Accordingly previously identified groups II and III are considered to form one group II/III).

Group IV : Claims 17-34

(System for selecting TV programmes and for taking account of a viewer's viewing preferences);

Group V : Claims 35-41

(System for storing audio notes while using a TV receiver);

Group VI : Claims 42-64

(System for receiving and displaying targeted commercials by a TV receiver;

Group VII: Claim 69

(System for recording a digitally broadcast television signal on an analogue recorder while enabling viewing another digital broadcast.

Of the groups of inventions identified above, groups I, IV, V, VI and VII were searched. In accordance with the applicants' payments and the letter dated 30.05.00, groups I, IV, V, VI and

VII are examined hereinbelow.

Dependent claims 65-68 each of which formally belongs to one of groups I, IV, V, VI and VII identified above are not examined for the following reasons as previously indicated (official communication PCT/IPEA/405 dated 27.04.00:

The claims are unclear and thus unallowable because they are drafted with substantial reference to the description and/or drawings which is not permitted under Art. 6 and Rule 6.3(a) PCT.

b)

The present application does not satisfy the criteria set forth in Articles 6, 33(2) and 33(3) PCT. Details of the objections are set out in paragraphs 2 to 6 below.

Moreover, the application suffers from formal deficiencies that are identified in paragraph 7 below.

The applicants' attention is drawn to the fact that, as a consequence of Rule 66.8(a) PCT the examiner is not permitted to carry out any amendments under the PCT procedure, however minor these may be.

2. Claims 1-5 (Group I)

The following documents are cited in respect of group I - the numbering will be adhered to in the rest of the procedure:

D1: US-A-5 233 422;

D2: US-A-4 528 585;

D3: JP-A-10 133 643 (Abstract);

D4: JP-A-05 037 873 (Abstract);

D5: JP-A-05 064 161 (Abstract);

D6: WO-A-91/19378.

**WRITTEN OPINION
SEPARATE SHEET**

International application No. PCT/GB98/03140

The subject-matter of claim 1 is cast in such broad terms that it is fully anticipated by the disclosure of any one of documents D1 (abstract; Figs. 1-3 and related text portions, particularly col. 3 lines 28-54; claim 1) and D2 (abstract; Figs. 1-3 and related text portions).

The additional subject-matter provided by claims 2 and 3 is also anticipated by the disclosure of any of documents D1 and D2 (cf passages cited above).

The additional subject-matter of claim 4 (memory means storing in digital form the image to be enlarged) is anticipated by D2 (means 108, 110 and 112 in Fig. 3, also col.3 line 59 - col.4 line 27).

The additional subject-matter of claim 5 pertains to "image enhancement means". Such means, eg means for changing brightness at image display, are found in any conventional television set and are therefore considered to be implicitly disclosed by document D1 that discloses a television receiver of a standard type for HDTV having (among other features), standard television receives being normally equipped with brightness controls. Moreover, document D2 discloses (Fig.3) a digital interpolator that inherently effects image enhancement. Accordingly, the additional features of claim 5 are anticipated by any of the disclosures of D1 (implicit disclosure) or D2 (explicit disclosure).

For the reasons given above, claims 1 to 5 each contravene the requirements of novelty and inventive step set out in **Articles 33(2) and 33(3) PCT**.

The disclosures of documents D3 to D6 are also relevant to the claims of group I.

3. Claims 17-34 (Group IV)

The following documents are cited in respect of group IV - the numbering will be adhered to in the rest of the procedure:

D7: WO-A-97/48230;

D8: US-A-5 410 344;

D9: US-A-5 223 924.

3.1. Claims 17, 18, 21, 26, 31-34 (Art. 33(2), 33(3) PCT)

D7 discloses (in terms of claim 17 on file):

A system for selecting television programs for viewing (D7: abstract, pp.1-2), comprising

- means for storing viewing preferences (D7: p.2 lines 17-18; claim 21: p.28 lines 8-10);
- means for using stored viewing preferences to generate a view list (D7: p.2 lines 21-23, 28-31, 37-38; p.14 lines 23-27; p.19 lines 16-24) comprised of program suggestions which includes items based substantially on what is usually watched (D7: p.2 lines 37-38; p.14 lines 23-27; p.19 lines 16-24; p.23 lines 3-29);
- means for marking a broadcast program currently being displayed and means for using said marking to modify said view list (D7: p.18 lines 31-36: marking of a program as a favourite by a user, but a program as such does not appear to be displayed yet; p.23 lines 3-29: according to the described embodiment the system identifies a program being watched for a predetermined time by a user, wherein the identification implies setting an internal mark for the program, and then the system searches for other available programs to update the list that is suppliable to the user).

Thus all features of claim 1 are anticipated by D7.

In light of the disclosure of D7, the additional features of dependent claims 18, 21, 26 (the claimed alternative pertaining to

"means for amending the view list") and 31-34 are also anticipated.

Accordingly, claim 17 lacks novelty. Dependent claims 18, 21, 26 and 31-34 each depending at least in one claimed alternative upon a non-novel claim therefore also lack novelty. Thus these claims contravene Articles 33(2) and 33(3) PCT.

3.2. Claims 19, 20, 22, 24, 27-29 (Art. 33(3), Art. 6 PCT)

The features of the first portion (p.40) of claim 19 is known from D7 (cf passages cited above). The remainder of claim 19 is not more than a normal design option which cannot substantiate an inventive step.

In claim 19, the word "making" should correctly read "marking".

As to claim 20, it is well-known in the art to use abbreviations for full text, such as abbreviated station names. An abbreviation is thus a coded version of a respective full text. Such a practice is exemplarily disclosed in D8 (Fig.3) indicating that space reserved in a field of a descriptor is smaller than normally required for the respective full text item (eg "director"). This implies that the space is filled with an abbreviation/code for the full text. Accordingly, the additional features of claim 1 cannot establish an inventive step.

The first portion of claim 22 pertaining to "adding an item (to the view list!?) on days other than the current day" is considered to be anticipated by D7 (eg p.7 lines 26-27) because the claimed feature appears to merely represent automatically updating the view list at times after one or more favourite programs have been entered therein by the system. The remainder of claim 22 ("where the item is part of a series transmitted on different days") pertains to previously well-known program characteristics

that do not appear to provide any limitation on the apparatus' characteristics. Notwithstanding the above, taking account of such normal program characteristics is considered a normal design option of the skilled person which option cannot substantiate an inventive step.

In claim 22, it is assumed that the feature "adding an item" should be read as "adding an item to the view list". The claim requires corresponding amendment.

The additional features of claim 24 are considered as obvious design options in light of the disclosure of D8 (Fig.6).

In claim 27, the claimed "means for amending the view list" is anticipated by D7. The provision as claimed of "means for checking if a program suggestion is still scheduled" is considered an obvious design option in view of D7 disclosing continuously updating the view list (D7: p.2 lines 26-27).

The same findings apply to claim 28.

Due to the multiple use of "or" and "and", claim 29 fails to clearly define its subject-matter, contrary to the requirement of clarity set out in **Article 6 PCT**. Due to this defect it is not at present possible to associate novelty or an inventive step with the claim's subject-matter. Notwithstanding the above, the following is to be noted:

D7 discloses a TV receiver having additional capabilities, including the generation of a view list. Standard TV receivers are known to have means for receiving additional data transmitted with TV signals. D7 discloses using program guide data and user's preference data to generate a view list, and discloses that the program guide data can be transmitted to the TV receiver from a variety of sources and via different paths. In light of the above, the skilled person would consider using a standard TV receiver's capability of receiving additional data for the purpose of transmitting the program guide data to the TV

receiver. Accordingly, such a combination of features cannot substantiate an inventive step.

For the reasons given above, claims 19, 20, 22, 24, 27-29 are considered to contravene Art. 33(3) PCT, each of these claims depending at least in one claimed alternative dependency upon another claim also contravening Art. 33(3) PCT).

It is to be noted that the disclosure of document D9 is also relevant to at least some of the claims dealt with in this group (IV) of claims.

3.3. Claims 23, 25, 30

The additional features of each of claims 23, 25 and 30 ("password protecting view lists") do not appear to be compromised by the presently available prior art and the obvious design options of the skilled person.

The additional features of claims 23, 25 and 30 are considered as not being linked to each other by a same inventive concept. Accordingly, in the event that the applicants maintain more than one of these three claims as mutually independent claims in this group (group IV) of inventions, an objection under Rule 13 PCT would have to be raised subsequently.

4. Claims 35-41 (Group V)

The following documents are cited in respect of group V - the numbering will be adhered to in the rest of the procedure:

D10: JP-A-60 005 686 (Abstract);

D11: US-A-5 5 697 079;

D12: JP-A-09 016 800 (Abstract).

4.1. Claims 35, 38 (Art. 33(2), 33(3) PCT)

The features of claim 35 are cast in such broad terms that the claimed subject-matter is anticipated by D10. Likewise, the additional features of claim 38 are anticipated by D10.

Consequently claims 35 and 38 contravene the requirements set out in Articles 33(2) and 33(3) PCT.

4.2. Claims 36, 39-41 (Art. 33(3) PCT)

The additional features of claim 36 (at least the alternatives wherein the editing effects a truncation or deletion as claimed as alternative effects of editing) are at least implicitly disclosed by D11 which discloses digitizing audio while using a television and muting sampled audio portions. Accordingly, the additional features of claim 36 cannot substantiate an inventive step.

Having regard to claim 39, D12 discloses a system for converting audio samples into a text equivalent while using voice/speech recognition. Therefore, the additional features of claim 39 cannot substantiate an inventive step.

As to claims 40 and 41, when text data is available, it is considered a normal and thus obvious design option of the skilled person to edit text data as required, and to display the data on a display screen, or to print or transfer the text data. Accordingly, the additional features of claims 40 and 41 cannot substantiate an inventive step.

Following from the above, claims 36, 39 and 40-41 contravene Article 33(3) PCT in that their features are obvious from combinations of D10 and D11, D10 and D12, and D10 and the normal design options of the skilled person, respectively. It is to be noted that each of these claims depends in at least one claimed alternative dependency upon another claim that also contravenes

Article 33(3) PCT.

4.3. Claim 37

The additional features of claim 37 do not appear to be compromised by the presently available prior art and the obvious design options of the skilled person.

5. Claims 42-64 (Group VI)

The following documents are cited in respect of group VI - the numbering will be adhered to in the rest of the procedure:

D9 : US-A-5 223 924;
D13: US-A-5 233 423;
D14: WO-A-97/49242;
D15: FR-A-2 726 717.

5.1. Claim 42 (Art. 33(2), 33(3) PCT)

The subject-matter of claim 41 is anticipated by document D13 (col.1 line 33 - col. 2 line 14). Thus the claim contravenes Articles 33(2) and 33(3) PCT.

5.2. Claims 43, 45 (Art. 33(2), 33(3), 6 PCT)

a) The additional features of claim 43 are design options that are well-known in the art, such as represented by remote control means for a TV set. This is supported by the disclosure of document D14 (Fig.1). Accordingly, the additional features of claim 43 cannot substantiate an inventive step.

b) The additional features of claim 45 do not appear to be disclosed in the written evidence provided by presently available documents D13 to D15. However, from the examiner's own knowledge, television systems in which centrally broadcast commercials

are locally replaced with commercials targeted for a specific end user or groups of end users were well-known in the art before the priority date of the application on file. In such known systems, the selection of commercials presented to a specific user or group of users was a function of data about a user/group of user, such data being typically held at a main broadcast or distribution centre. For meeting such requirements, it is a prerequisite that the user-specific commercials are at least intermediately stored locally - downstream at sub-distribution units, or in the end user's terminals themselves.

In this context, a related concept of displaying at a user's TV terminal customized/targeted information TV based on acquired user's preferences is known from document D9 (col. 2 lines 3-15; Figs. 1 and 3) which discloses the provision in a television receiver of a processor 35 having memory means 56 for storing personalized TV information intended to be merged with received broadcast TV information.

In light of these findings, an inventive step cannot be associated with the additional features of claim 45.

c) As to claim 46, it is held that in interactive television systems known in the art, it was previously known to display information such as information about commercial/advert (eg a real estate object) while waiting for a user's input in response to the display. This corresponds to using the basic principles of interactive television.

In view of the above, an inventive step cannot be associated with the additional features of claim 46.

d) In claim 47, an attempt is made to define the additional subject-matter in terms of information content, whereas the PCT requires the subject-matter of an apparatus claim to be defined in terms of features capable of defining an apparatus. Accordingly, the subject-matter of claim 47 is not clearly defined, contrary to **Article 6 PCT**.

In view of this deficiency, it is not possible to associate an inventive step with the additional features of claim 47.

e) Claim 48 fails to define its additional subject-matter in terms of apparatus features as required by **Article 6 PCT**. In view of this deficiency and of the findings set out in paragraphs 5.2.b) and c) above according to which the additional features of claim 48 appear to be mere obvious design options, the additional features of claim 48 cannot substantiate an inventive step.

f) Claim 49 fails to define its additional subject-matter in terms of apparatus features as required by **Article 6 PCT**. In view of this deficiency and in view of the fact that in the field of telecommunications in general it was well-known to indicate an arrival of received data by appropriate means to the person(s) concerned, the additional features of claim 49 cannot substantiate an inventive step.

g) As to claim 50, reference is made to the known system addressed in paragraph 5.2.b) above. As stated above, in such a system, the selection of commercials is based on user-related data/user's preferences. In such a case it is considered an obvious design option that the broadcaster collects the user-related data for enabling an association of targeted data such as targeted commercials with a specific user or group of users. In such a case, and in compliance with the concept disclosed in D9 (cf paragraph 5.2.b) above) it is a prerequisite to transmit at least once the targeted data/commercials downstream, eg to the user's terminal, for immediate display or intermediate storage and subsequent display. Accordingly, the additional features of claim 50 cannot substantiate an inventive step.

h) In light of the features of known television systems set out in the previous paragraphs, the additional features of claims 51

and 52 appear to merely represent obvious features.

i) In claim 53, the meaning of "the means for displaying selected commercials uses user preferences" is obscure because it is not clear why/what for/ and how the means for displaying uses such data. It is further considered that the purpose of means for displaying is displaying, and that the use of user preferences should be effected eg in the previously claimed means for selecting. Furthermore, it is not clear in which manner and what for the claimed "current selections" (plural ones at a same time?!) are intended to be used in conjunction with the "user preferences". For these reasons, the claim contravenes **Article 6 PCT** and it is not possible to identify in the claim additional subject-matter upon which an inventive step could be based.

Corresponding objections apply to claims 54 and 55.

j) The additional features of claim 56 are not sufficiently clear, in contrast to the requirements set out in **Article 6 PCT**. This is because the claim fails to specify for what the generated codeword is representative, fails to specify what precisely is meant by "statistical codeword".

Moreover, it is assumed that the claim should correctly read "... in which the system comprises means for monitoring viewers' responses ...".

Notwithstanding the above, it is considered that monitoring viewers' responses is an obvious activity in establishing user preference data as known in the art. The result of establishing preference data would always have to be provided in a format enabling the further processing/analysis thereof. Accordingly, since storing data in a format whatsoever always require the use of codes, the second portion of the additional features of claim 56 is also obvious in the art.

In view of the above, the additional features of claim 56 cannot substantiate an inventive step.

For reasons corresponding to the above, the additional features of claim 57 are also considered to be obvious.

k) An additional feature of claim 58 ("the representative code word") lacks an antecedent in at least claims 42 to 55 upon which claim 58 depends, thus obscuring the claim's scope of protection (**Article 6 PCT** contravened).

Notwithstanding the above, the claim's additional subject-matter appears to relate to nothing but displaying information on a display screen, wherein the information represents either (when depending upon claim 56) user preference data or (when depending upon claim 57) control data representative of a selection of a commercial (eg displaying "option 1" as text on the user's screen when selecting and displaying an associated commercial). Displaying such items forms part of the normal design options of the skilled person and cannot substantiate an inventive step.

In view of the above, it is not possible to associate an inventive step with the additional features of claim 58.

l) The additional features of claim 59 represent an obvious design option in the design of interactive television systems such as addressed in paragraph 5.2.b) above.

m) In light of the normal design options of the skilled persons, an inventive step cannot at present be identified in the additional features of claim 60 to 64.

n) Following from the above, dependent claims 43 and 45-64 contravene **Art. 33(3) PCT**, because their respective additional subject-matter does not provide an inventive contribution and because each of these claims depends on a non-inventive claim.

5.3. Claim 44

The additional features of claim 44 do not appear to be compromised by the presently available prior art and the obvious design options of the skilled person.

6. Claim 69 (Group VII)

The following documents are cited in respect of group VII - the numbering will be adhered to in the rest of the procedure:

D16: EP-A-0 726 574;

D17: EP-A-0 785 675;

D18: JP-A-09 186 969 (Abstract).

Claim 69 (apparatus claim) effectively provides the following features:

A system

for (ie capable of) recording a digitally transmitted television broadcast on an analogue video cassette recorder whilst viewing another digital broadcast,

the system comprising

- (a) - two digital tuners and
- (b) - at least one digital to analogue converter,
 - (x1) wherein one digitally transmitted television signal is decoded by one of the digital tuners,
 - (x2) converted into an analogue signal using the digital to analogue converter
 - (x3) and thereafter relayed to an analogue video cassette recorder or other such device
 - (x4) whilst leaving the other digital tuner available for decoding another digital transmission.

The claimed system is "for recording" while it lacks to include a means for such recording. Thus an essential feature of the alleged invention is missing, contrary to the requirements set out in Article 6 PCT.

Document D16 (eg Figs. 6, 7) discloses a system for digitally recording a transmitted television broadcast on a recorder (memory section 30). The system includes a tuner (N-channel broadcast receiving section 12) a plurality of channels and an M-channel selection section 13. Accordingly (col.16 lines 38...:) "An M-channel selection section 13 selects a M number of channels from the N number of channels supplied ... outputting the video ands the sound corresponding to the selected M number of channels to an M-channel video/sound recording section 23. from an input section".

In the known system a plurality of N channels is received simultaneously. Some (number M) of the received channels are selected for recording. The data of all received channels is fed to a selective output section capable of supplying the data of at least one of the received channels to a display section.

Thus D16 discloses the principle underlying claim 69 on file concerning parallel reception of plural television channels, recording a selection thereof and enabling displaying another selection of channels including a channel that is not recorded.

Document D17 discloses plural tuners (Fig.1) arranged for simultaneous reception and decoding of plural digital television broadcast transmissions, and also discloses recording of the data of one or more selected received and decoded digital transmissions (abstract). As one example of a recording medium, an optical disk is mentioned (col. 10 lines 28-32).

Document D18 discloses recording digital data on a recording medium using analogue magnetic recording. For this purpose, a digital to analogue converter 7 is provided.

The skilled person routinely attempting to modify/improve the system shown in D17 would take account of the teachings of D18 in the same technical field as D17 concerning the recording of digital data. Accordingly, the skilled person would consider

analogue recording instead of digital recording und would provide a digital to analogue converter.

The skilled person would further take account of the teachings of D16 in the same technical field as D17 concerning reception, recording and display of plural television broadcasts, as identified above. Accordingly, the skilled person would consider recording one or more received transmissions while leaving other transmissions for display.

In view of the above, it is considered that the subject-matter of claim 69 is obvious from the combined disclosures of D17, D18 and D16, so that the claim contravenes **Article 33(3) PCT**.

7. Formal deficiencies and remarks

- a) Of the different groups of inventions identified above, those ones that were not searched and therefore are excluded from examination (of group II/III), and the respective descriptive passages are not excised from the application.
- b) The claims are not complemented with reference numbers as required by Rule 6.2(b) PCT.
- c) The independent claims are not cast in the two-part form as required by Rule 6.3(b) PCT.
- d) Documents representing the relevant prior art (the documents cited in the International Search Report and identified as relevant in paragraphs 2-6 above are not identified in the description nor are their respective relevant contents summarized in the description, contrary to Rule 5.1.(a) ii) PCT.



☒ EPA/EPO/OEB
D-80298 München
☎ +49 89 2399-0
TX 523 656 epmu d
FAX +49 89 2399-4465

Europäisches
Patentamt

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Correspondence with the EPO on PCT Chapter II demands

In order to ensure that your PCT Chapter II demand is dealt with as promptly as possible you are requested to use the enclosed self-adhesive labels with any correspondence relating to the demand sent to the Munich Office.

One of these labels should be affixed to a prominent place in the upper part of the letter or form etc. which you are filing.

REC'D 17 NOV 2000

WIPO

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

15

Applicant's or agent's file reference SMC/RC/P4126	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/GB98/03140	International filing date (day/month/year) 21/10/1998	Priority date (day/month/year) 11/08/1998
International Patent Classification (IPC) or national classification and IPC H04N5/445		
Applicant 4TV LIMITED et al.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.



2. This REPORT consists of a total of 21 sheets, including this cover sheet.

- ☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☒ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☒ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☒ Certain defects in the international application
- VIII ☒ Certain observations on the international application

Date of submission of the demand 07/03/2000	Date of completion of this report 15.11.2000
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized officer Loeser, E Telephone No. +49 89 2399 8482 

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/GB98/03140

I. Basis of the report

1. This report has been drawn on the basis of *(substitute sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to the report since they do not contain amendments (Rules 70.16 and 70.17).)*:

Description, pages:

1-37 as originally filed

Claims, No.:

1-69 as originally filed

Drawings, sheets:

1-22 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/GB98/03140

☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or to be industrially applicable have not been examined in respect of:

☐ the entire international application.

☒ claims Nos. 6-16, 65-68.

because:

☐ the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination (*specify*):

☒ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. 6, 65-68 are so unclear that no meaningful opinion could be formed (*specify*):
see separate sheet

☐ the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.

☒ no international search report has been established for the said claims Nos. 7-16.

2. A meaningful international preliminary examination report cannot be carried out due to the failure of the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative Instructions:

☐ the written form has not been furnished or does not comply with the standard.

☐ the computer readable form has not been furnished or does not comply with the standard.

IV. Lack of unity of invention

1. In response to the invitation to restrict or pay additional fees the applicant has:

☐ restricted the claims.

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/GB98/03140

- ☒ paid additional fees.
- ☐ paid additional fees under protest.
- ☐ neither restricted nor paid additional fees.
2. ☐ This Authority found that the requirement of unity of invention is not complied and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.
3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is
- ☐ complied with.
- ☒ not complied with for the following reasons:
see separate sheet
4. Consequently, the following parts of the international application were the subject of international preliminary examination in establishing this report:
- ☐ all parts.
- ☒ the parts relating to claims Nos. 1-5, 17-64, 69.

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes:	Claims	19, 20, 22-25, 27-30, 36-37, 39-41, 43-64, 69
	No:	Claims	1-5, 17, 18, 21, 26, 31-35, 38, 42
Inventive step (IS)	Yes:	Claims	23, 25, 30, 37, 44
	No:	Claims	1-5, 17-22, 24, 26-29, 31-36, 38-43, 45-64, 69
Industrial applicability (IA)	Yes:	Claims	1-5, 17-64, 69
	No:	Claims	

2. Citations and explanations **see separate sheet**

VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted:
see separate sheet

VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/GB98/03140

see separate sheet

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/GB98/03140

1. General

a) Concerning Section IV:

The application contravenes Rule 13.1 PCT because the application comprises the following plural groups of separate inventions that are not linked with each other by a common and inventive technical concept:

Group I : Claims 1-5

(Selecting an area of a displayed TV image for enlarged display);

Group II/III : Claims 7-16

(Selecting from displayed video images, capturing/storing selected images and selectively displaying images from the stored ones)

The minor differences identifiable between the independent claims of groups III and II that were established in the International Search Report do not appear to justify separating claims 7-16 into two separate groups of inventions. Accordingly previously identified groups II and III are considered to form one group II/III).

Group IV : Claims 17-34

(System for selecting TV programmes and for taking account of a viewer's viewing preferences);

Group V : Claims 35-41

(System for storing audio notes while using a TV receiver);

Group VI : Claims 42-64

(System for receiving and displaying targeted commercials by a TV receiver);

Group VII: Claim 69

(System for recording a digitally broadcast television signal on an analogue recorder while enabling viewing another digital broadcast).

Of the groups of inventions identified above, groups I, IV, V, VI and VII were searched. In accordance with the applicants' payments, groups I, IV, V, VI and VII form the basis of this

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/GB98/03140

report.

b) Concerning Section III:

Dependent claims 65-68 each of which formally belongs to one of groups I, IV, V, VI and VII identified above, and claim 6 are excluded from examination for the following reasons:

The claims are unclear and thus unallowable because they are drafted with substantial reference to the description and/or drawings which is not permitted under Art. 6 and Rule 6.3(a) PCT.

c) Concerning Sections VIII, V and IV:

The present application does not satisfy the criteria set forth in Articles 6, 33(2) and 33(3) PCT and in Rule 13 PCT. Details of the objections are set out in paragraphs 2 to 6 below. The claimed subject-matter is industrially applicable.

d) Concerning Section VII:

The application suffers from formal deficiencies that are identified in paragraph 7 below.

2. Concerning Section V: Claims 1-5 (Group I)

The following documents are cited in respect of group I - the numbering will be adhered to in the rest of the procedure:

D1: US-A-5 233 422;
D2: US-A-4 528 585;
D3: JP-A-10 133 643 (Abstract);
D4: JP-A-05 037 873 (Abstract);
D5: JP-A-05 064 161 (Abstract);
D6: WO-A-91/19378.

The subject-matter of claim 1 is cast in such broad terms that it is fully anticipated by the disclosure of any one of docu-

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/GB98/03140

ments D1 (abstract; Figs. 1-3 and related text portions, particularly col. 3 lines 28-54; claim 1) and D2 (abstract; Figs. 1-3 and related text portions).

The additional subject-matter provided by claims 2 and 3 is also anticipated by the disclosure of any of documents D1 and D2 (cf passages cited above).

The additional subject-matter of claim 4 (memory means storing in digital form the image to be enlarged) is anticipated by D2 (Fig.3: 108, 110 and 112; col.3 line 59 - col.4 line 27).

The additional subject-matter of claim 5 pertains to "image enhancement means". Such means, eg means for changing brightness at image display, are found in any conventional television set and are therefore considered to be implicitly disclosed by document D1 that discloses a television receiver of a standard type for HDTV, standard television receivers being normally equipped with brightness controls.

Moreover, document D2 discloses (Fig.3) a digital interpolator that inherently effects image enhancement. Accordingly, the additional features of claim 5 are anticipated by any of D1 (implicit disclosure) or D2 (explicit disclosure).

For the reasons given above, claims 1 to 5 each do not meet the requirements of novelty and inventive step set out in **Articles 33(2) and 33(3) PCT**.

The disclosures of documents D3 to D6 are also relevant to the claims of group I.

3. Concerning Sections V, VIII and IV:
Claims 17-34 (Group IV)

The following documents are cited in respect of group IV - the

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/GB98/03140

numbering will be adhered to in the rest of the procedure:

D7: WO-A-97/48230;

D8: US-A-5 410 344;

D9: US-A-5 223 924.

3.1. Claims 17, 18, 21, 26, 31-34 (Art. 33(2), 33(3) PCT)

D7 discloses (in terms of claim 17 on file):

A system for selecting television programs for viewing

(D7: abstract, pp.1-2), comprising

- means for storing viewing preferences (D7: p.2 lines 17-18; claim 21: p.28 lines 8-10);
- means for using stored viewing preferences to generate a view list (D7: p.2 lines 21-23, 28-31, 37-38; p.14 lines 23-27; p.19 lines 16-24) comprised of program suggestions which includes items based substantially on what is usually watched (D7: p.2 lines 37-38; p.14 lines 23-27; p.19 lines 16-24; p.23 lines 3-29);
- means for marking a broadcast program currently being displayed and means for using said marking to modify said view list (D7: p.18 lines 31-36: marking of a program as a favourite by a user, but a program as such does not appear to be displayed yet; p.23 lines 3-29: according to the described embodiment the system identifies a program being watched for a predetermined time by a user, wherein the identification implies setting an internal mark for the program, and then the system searches for other available programs to update the list that is suppliable to the user).

Thus all features of claim 17 are anticipated by D7.

In light of the disclosure of D7, the additional features of dependent claims 18, 21, 26 (the alternative pertaining to "means for amending the view list") and 31-34 are also anticipated.

Accordingly, claim 17 lacks novelty. Dependent claims 18, 21, 26

and 31-34 each depending at least in one claimed alternative upon a non-novel claim (claim 17) therefore also lack novelty. Thus these claims contravene **Articles 33(2) and 33(3) PCT**.

3.2. Claims 19, 20, 22, 24, 27-29 (Art. 33(3), Art. 6 PCT)

The features of the first portion (p.40) of claim 19 is known from D7 (cf passages cited above). The remainder of claim 19 is not more than a normal design option which cannot substantiate an inventive step. In claim 19, "making" should correctly read "marking".

As to claim 20, it is well-known in the art to use abbreviations for full text, such as abbreviated station names. An abbreviation is thus a coded version of a respective full text. Such a practice is exemplarily disclosed in D8 (Fig.3) indicating that space reserved in a field of a descriptor is smaller than normally required for the respective full text item (eg "director"). This implies that the space is filled with an abbreviation/code for the full text. Accordingly, the additional features of claim 1 cannot establish an inventive step.

The first portion of claim 22 pertaining to "adding an item (to the view list!?) on days other than the current day" is considered to be anticipated by D7 (eg p.7 lines 26-27) because the claimed feature appears to merely represent automatically updating the view list at times after one or more favourite programs have been entered therein by the system. The remainder of claim 22 ("where the item is part of a series transmitted on different days") pertains to previously well-known program characteristics that do not appear to provide any limitation on the apparatus' characteristics. Notwithstanding the above, taking account of such normal program characteristics is considered a normal design option of the skilled person which option cannot substantiate an inventive step.

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/GB98/03140

In claim 22, it is assumed that the feature "adding an item" should be read as "adding an item to the view list". The claim requires corresponding amendment.

The additional features of claim 24 are considered as obvious design options in light of the disclosure of D8 (Fig.6).

In claim 27, the claimed "means for amending the view list" is anticipated by D7. The provision as claimed of "means for checking if a program suggestion is still scheduled" is considered an obvious design option in view of D7 disclosing continuously updating the view list (D7: p.2 lines 26-27).

The same findings apply to claim 28.

Due to the multiple use of "or" and "and", claim 29 fails to clearly define its subject-matter, contrary to the requirement of clarity set out in **Article 6 PCT**. Due to this defect it is not at present possible to associate an inventive step with the claim's subject-matter. Notwithstanding the above, the following is to be noted:

D7 discloses a TV receiver having additional capabilities, including the generation of a view list. Standard TV receivers are known to have means for receiving additional data transmitted with TV signals. D7 discloses using program guide data and user's preference data to generate a view list, and discloses that the program guide data can be transmitted to the TV receiver from a variety of sources and via different paths. In light of the above, the skilled person would consider using a standard TV receiver's capability of receiving additional data for the purpose of transmitting the program guide data to the TV receiver. Accordingly, such a combination of features could not substantiate an inventive step.

For the reasons given above, claims 19, 20, 22, 24, 27-29 are considered to contravene **Art. 33(3) PCT**, each of these claims

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/GB98/03140

depending at least in one claimed alternative dependency upon another claim also contravening Art. 33(3) PCT).

It is to be noted that the disclosure of document D9 is also relevant to at least some of the claims dealt with in this group (IV) of claims.

3.3. Claims 23, 25, 30

The additional features of each of claims 23 ("warning; countdown timer"), 25 ("ordering according to frequency of viewing") and 30 ("password protecting view lists") do not appear to be compromised by the presently available prior art and the obvious design options of the skilled person. Thus each of claims 23, 25 and 30 is considered to comprise inventive subject-matter.

However, the additional features of claims 23, 25 and 30 are considered as not being linked to each other by a same inventive concept. Accordingly, the requirement of unity set out in Rule 13 PCT is contravened within the claims of group IV.

4. Concerning Section V: Claims 35-41 (Group V)

The following documents are cited in respect of group V - the numbering will be adhered to in the rest of the procedure:

D10: JP-A-60 005 686 (Abstract);

D11: US-A-5 5 697 079;

D12: JP-A-09 016 800 (Abstract).

4.1. Claims 35, 38 (Art. 33(2), 33(3) PCT)

The features of claim 35 are cast in such broad terms that the claimed subject-matter is anticipated by D10. Likewise, the additional features of claim 38 are anticipated by D10.

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/GB98/03140

Consequently claims 35 and 38 contravene the requirements set out in **Articles 33(2) and 33(3) PCT**.

4.2. Claims 36, 39-41 (Art. 33(3) PCT)

The additional features of claim 36 (at least the alternatives where the editing effects a truncation or deletion as claimed as alternative effects of editing) are at least implicitly disclosed by D11 disclosing digitizing audio while using a television, and muting sampled audio portions. Accordingly, the additional features of claim 36 cannot substantiate an inventive step.

Having regard to claim 39, D12 discloses a system for converting audio samples into a text equivalent while using voice/speech recognition. Therefore, the additional features of claim 39 cannot substantiate an inventive step.

As to claims 40 and 41, when text data is available, it is considered a normal and thus obvious design option of the skilled person to edit text data as required, and to display the data on a display screen, or to print or transfer the text data. Accordingly, the additional features of claims 40 and 41 cannot substantiate an inventive step.

Following from the above, claims 36, 39 and 40-41 contravene **Article 33(3) PCT** in that their features are obvious from combinations of D10 and D11, D10 and D12, and D10 and the normal design options of the skilled person, respectively. It is to be noted that each of these claims depends in at least one claimed alternative dependency upon another claim that also contravenes Article 33(3) PCT.

4.3. Claim 37

The additional features of claim 37 do not appear to be compro-

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/GB98/03140

mised by the presently available prior art and the obvious design options of the skilled person.

5. Concerning Sections V and VIII:
Claims 42-64 (Group VI)

The following documents are cited in respect of group VI - the numbering will be adhered to in the rest of the procedure:

D9 : US-A-5 223 924;
D13: US-A-5 233 423;
D14: WO-A-97/49242;
D15: FR-A-2 726 717.

5.1. Claim 42 (Art. 33(2), 33(3) PCT)

The subject-matter of claim 42 is anticipated by document D13 (col.1 line 33 - col. 2 line 14). Thus the claim contravenes Articles 33(2) and 33(3) PCT.

5.2. Claims 43, 45-64 (Art. 33(3), 6 PCT)

a) The additional features of claim 43 are design options that are well-known in the art, such as represented by remote control means for a TV set. This is supported by the disclosure of document D14 (Fig.1). Accordingly, the additional features of claim 43 cannot substantiate an inventive step.

b) The additional features of claim 45 do not appear to be disclosed in the written evidence provided by presently available documents D13 to D15. However, from the examiner's own knowledge, television systems in which centrally broadcast commercials are locally replaced with commercials targeted for a specific end user or groups of end users were well-known in the art before the priority date of the application on file. In such known systems, the selection of commercials presented to a specific

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/GB98/03140

user or group of users was a function of data about a user/group of user, such data being typically held at a main broadcast or distribution centre. For meeting such requirements, it is a prerequisite that the user-specific commercials are at least intermediately stored locally - downstream at sub-distribution units, or in the end users' terminals themselves.

In this context, a related concept of displaying at a user's TV terminal customized/targeted information TV based on acquired user's preferences is known from document D9 (col. 2 lines 3-15; Figs. 1 and 3) which discloses the provision in a television receiver of a processor 35 having memory means 56 for storing personalized TV information intended to be merged with received broadcast TV information.

In light of these findings, an inventive step cannot be associated with the additional features of claim 45.

c) As to claim 46, it is held that in interactive television systems known in the art, it was previously known to display information such as information about commercial/advert (eg a real estate object) while waiting for a user's input in response to the display. This corresponds to using the basic principles of interactive television.

In view of the above, an inventive step cannot be associated with the additional features of claim 46.

d) In claim 47, an attempt is made to define the additional subject-matter in terms of information content, whereas the PCT requires the subject-matter of an apparatus claim to be defined in terms of features capable of defining an apparatus. Accordingly, the subject-matter of claim 47 is not clearly defined, contrary to **Article 6 PCT**.

In view of this deficiency, it is not possible to associate an inventive step with the additional features of claim 47.

e) Claim 48 fails to define its additional subject-matter in

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/GB98/03140

terms of apparatus features as required by **Article 6 PCT**. In view of this deficiency and of the findings set out in paragraphs 5.2.b) and c) above according to which the additional features of claim 48 appear to be mere obvious design options, the additional features of claim 48 cannot substantiate an inventive step.

f) Claim 49 fails to define its additional subject-matter in terms of apparatus features as required by **Article 6 PCT**. In view of this deficiency and in view of the fact that in the field of telecommunications in general it was well-known to indicate an arrival of received data by appropriate means to the person(s) concerned, the additional features of claim 49 cannot substantiate an inventive step.

g) As to claim 50, reference is made to the known system addressed in paragraph 5.2.b) above. As stated above, in such a system, the selection of commercials is based on user-related data/user's preferences. In such a case it is considered an obvious design option that the broadcaster collects the user-related data for enabling an association of targeted data such as targeted commercials with a specific user or group of users. In such a case, and in compliance with the concept disclosed in D9 (cf paragraph 5.2.b) above) it is a prerequisite to transmit at least once the targeted data/commercials downstream, eg to the user's terminal, for immediate display or intermediate storage and subsequent display. Accordingly, the additional features of claim 50 cannot substantiate an inventive step.

h) In light of the features of known television systems set out in the previous paragraphs, the additional features of claims 51 and 52 appear to merely represent obvious features.

i) In claim 53, the meaning of "the means for displaying selected commercials uses user preferences" is obscure because it is

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/GB98/03140

not clear why/what for/ and how the means for displaying uses such data. It is further considered that the purpose of means for displaying is displaying, and that the use of user preferences should be effected eg in the previously claimed means for selecting. Furthermore, it is not clear in which manner and what for the claimed "current selections" (plural ones at a same time?!) are intended to be used in conjunction with the "user preferences". For these reasons, the claim contravenes **Article 6 PCT** and it is not possible to identify in the claim additional subject-matter upon which an inventive step could be based.

Corresponding objections apply to claims 54 and 55.

j) The additional features of claim 56 are not sufficiently clear, in contrast to the requirements set out in **Article 6 PCT**. This is because the claim fails to specify for what the generated codeword is representative, fails to specify what precisely is meant by "statistical codeword".

Moreover, it is assumed that the claim should correctly read "... in which the system comprises means for monitoring viewers' responses ...".

Notwithstanding the above, it is considered that monitoring viewers' responses is an obvious activity in establishing user preference data as known in the art. The result of establishing preference data would always have to be provided in a format enabling the further processing/analysis thereof. Accordingly, since storing data in a format whatsoever always require the use of codes, the second portion of the additional features of claim 56 is also obvious in the art.

In view of the above, the additional features of claim 56 cannot substantiate an inventive step.

For reasons corresponding to the above, the additional features of claim 57 are also considered to be obvious.

k) An additional feature of claim 58 ("the representative code

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/GB98/03140

word") lacks an antecedent in at least claims 42 to 55 upon which claim 58 depends, thus obscuring the claim's scope of protection (**Article 6 PCT** contravened).

Notwithstanding the above, the claim's additional subject-matter appears to relate to nothing but displaying information on a display screen, wherein the information represents either (when depending upon claim 56) user preference data or (when depending upon claim 57) control data representative of a selection of a commercial (eg displaying "option 1" as text on the user's screen when selecting and displaying an associated commercial). Displaying such items forms part of the normal design options of the skilled person and cannot substantiate an inventive step.

In view of the above, it is not possible to associate an inventive step with the additional features of claim 58.

l) The additional features of claim 59 represent an obvious design option in the design of interactive television systems such as addressed in paragraph 5.2.b) above.

m) In light of the normal design options of the skilled persons, an inventive step cannot at present be identified in the additional features of claim 60 to 64.

n) Following from the above, dependent claims 43 and 45-64 contravene **Art. 33(3) PCT**, because their respective additional subject-matter does not provide an inventive contribution and because each of these claims depends on a non-inventive claim.

5.3. Claim 44

The additional features of claim 44 do not appear to be compromised by the presently available prior art and the obvious design options of the skilled person.

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/GB98/03140

6. Concerning Sections V and VIII:

Claim 69 (Group VII)

The following documents are cited in respect of group VII - the numbering will be adhered to in the rest of the procedure:

D16: EP-A-0 726 574;

D17: EP-A-0 785 675;

D18: JP-A-09 186 969 (Abstract).

Claim 69 (apparatus claim) effectively provides the following features:

A system

for (ie capable of) recording a digitally transmitted television broadcast on an analogue video cassette recorder whilst viewing another digital broadcast,

the system comprising

(a) - two digital tuners and

(b) - at least one digital to analogue converter,

(x1) wherein one digitally transmitted television signal is decoded by one of the digital tuners,

(x2) converted into an analogue signal using the digital to analogue converter

(x3) and thereafter relayed to an analogue video cassette recorder or other such device

(x4) whilst leaving the other digital tuner available for decoding another digital transmission.

The claimed system is "for recording" while it lacks to include a means for such recording. Thus an essential feature of the alleged invention is missing, contrary to the requirements set out in **Article 6 PCT**.

Document D16 (eg Figs. 6, 7) discloses a system for digitally recording a transmitted television broadcast on a recorder (memory section 30). The system includes a tuner (N-channel

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/GB98/03140

broadcast receiving section 12) a plurality of channels and an M-channel selection section 13. Accordingly (col.16 lines 38...:) "An M-channel selection section 13 selects a M number of channels from the N number of channels supplied ... outputting the video and the sound corresponding to the selected M number of channels to an M-channel video/sound recording section 23. from an input section".

In the known system a plurality of N channels is received simultaneously. Some (number M) of the received channels are selected for recording. The data of all received channels is fed to a selective output section capable of supplying the data of at least one of the received channels to a display section.

Thus D16 discloses the principle underlying claim 69 on file concerning parallel reception of plural television channels, recording a selection thereof and enabling displaying another selection of channels including a channel that is not recorded.

Document D17 discloses plural tuners (Fig.1) arranged for simultaneous reception and decoding of plural digital television broadcast transmissions, and also discloses recording of the data of one or more selected received and decoded digital transmissions (abstract). As one example of a recording medium, an optical disk is mentioned (col. 10 lines 28-32).

Document D18 discloses recording digital data on a recording medium using analogue magnetic recording. For this purpose, a digital to analogue converter 7 is provided.

The skilled person routinely attempting to modify/improve the system shown in D17 would take account of the teachings of D18 in the same technical field as D17 concerning the recording of digital data. Accordingly, the skilled person would consider analogue recording instead of digital recording and would provide a digital to analogue converter.

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/GB98/03140

The skilled person would further take account of the teachings of D16 in the same technical field as D17 concerning reception, recording and display of plural television broadcasts, as identified above. Accordingly, the skilled person would consider recording one or more received transmissions while leaving other transmissions for display.

In view of the above, it is considered that the subject-matter of claim 69 is obvious from the combined disclosures of D17, D18 and D16, so that the claim contravenes **Article 33(3) PCT**.

7. Concerning Section VII: Formal deficiencies and remarks

a) Of the different groups of inventions identified above, those ones that were not searched (ie group II/III) are excluded from examination. The respective descriptive passages are at present not excised from the application.

b) The claims are not complemented with reference numbers as required by Rule 6.2(b) PCT.

c) The independent claims are not cast in the two-part form as required by Rule 6.3(b) PCT.

d) Documents representing the relevant prior art (the documents cited in the International Search Report and identified as relevant in paragraphs 2-6 above are not identified in the description nor are their respective relevant contents summarized in the description, contrary to Rule 5.1.(a) ii) PCT.

INTERNATIONAL SEARCH REPORT

international application No.

PCT/GB 98/ 03140

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:

3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.

2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. ☒ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:

1-5, 17-64, 65, 66, 67, 68, 69

4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☒ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/GB 98/03140

A. CLASSIFICATION OF SUBJECT MATTER

IPC 6 H04N5/445 H04N5/775 H04N7/173 H04N5/00 H04N5/44

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 6 H04N G10H

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages.	Relevant to claim No.
X	US 5 233 422 A (FUJIMORI YASUHIRO ET AL) 3 August 1993 see abstract see column 3, line 9 - column 4, line 20; figures 1-3	1-4
X	US 4 528 585 A (BOLGER THOMAS V) 9 July 1985 see column 1, line 1 - line 49 see column 2, line 5 - line 49; figure 1	1-5
X	PATENT ABSTRACTS OF JAPAN vol. 097, no. 010, 31 October 1997 & JP 09 163260 A (SONY CORP), 20 June 1997 see abstract	1-3

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Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"&" document member of the same patent family

Date of the actual completion of the international search

25 June 1999

Date of mailing of the international search report

19. 07. 99

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Fuchs, P

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/GB 98/03140

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			DE 69128784 T	14-05-1998

INTERNATIONAL SEARCH REPORT

Inte: Application No

PCT/GB 98/03140

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 410 344 A (BARKER ALVA C ET AL) 25 April 1995 see column 1, line 67 - column 2, line 40 see column 4, line 22 - line 51; figure 2 see column 7, line 55 - line 65	17-19, 31,32,34
A	US 5 697 079 A (SPIVEY RONNY) 9 December 1997 see abstract see column 1, line 44 - column 2, line 20; figures 1,5	35,36
A	PATENT ABSTRACTS OF JAPAN vol. 009, no. 115 (E-315), 18 May 1985 & JP 60 005686 A (MATSUSHITA DENKI SANGYO KK), 12 January 1985 see abstract	35,38
A	PATENT ABSTRACTS OF JAPAN vol. 097, no. 005, 30 May 1997 & JP 09 016800 A (FUJI ELECTRIC CO LTD), 17 January 1997 see abstract	35, 39, 40
A	FR 2 712 714 A (BOULAY JEAN MARIE) 24 May 1995 see the whole document	35
X	WO 97 49242 A (HUNWICH KEITH ;SCHEIN STEVEN (US); ALBA THERESA (US); FOLKER DAVID) 24 December 1997 see page 9, line 24 - page 10, line 29 see page 19, line 21 - page 20, line 6; claims 1,7,21; figure 4A	42, 43, 48, 63
A	US 5 233 423 A (JERNIGAN FOREST E ET AL) 3 August 1993 see column 1, line 29 - column 2, line 15; figures 1-2E	47, 49, 59
X	FR 2 726 717 A (LACROSSE PHILIPPE) 10 May 1996 see page 4, line 1 - page 5, line 25; figures 1,2 see page 2, line 27 - page 3, line 17	42, 43, 45, 47, 48, 59, 63 49, 51
A	EP 0 785 675 A (TOKYO SHIBAURA ELECTRIC CO) 23 July 1997 see abstract; figure 1	69
A	EP 0 726 574 A (MATSUSHITA ELECTRIC IND CO LTD) 14 August 1996 see column 1, line 1 - line 51; figure 16	69

-/--

Ref
09/762740

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference SMC/LF/P4126	FOR FURTHER ACTION see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. PCT/GB 98/ 03140	International filing date (day/month/year) 21/10/1998	(Earliest) Priority Date (day/month/year) 11/08/1998
Applicant DANMERE LIMITED et al.		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 8 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

- a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international search was carried out on the basis of the sequence listing :

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ Certain claims were found unsearchable (See Box I).

3. ☒ Unity of invention is lacking (see Box II).

4. With regard to the title,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract,

☐ the text is approved as submitted by the applicant.

☒ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the drawings to be published with the abstract is Figure No.

☐ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

☒ None of the figures.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/GB 98/ 03140

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:

3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.

2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.

3. ☒ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:

1-5, 17-64, 65, 66, 67, 68, 69

4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☒ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 1-5,65

Television control/operating system for displaying moving pictures having means for selecting and enlarging a predetermined area for display.

2. Claims: 7-12

TV receiver with a frame grabber and connection to an image printing apparatus

3. Claims: 13-16

System for taking a copy of images displayed on a television receiver

4. Claims: 17-34,66

System for selection of programmes and storing viewing preferences.

5. Claims: 35-41,67

System for storing audio notes while using a television receiver.

6. Claims: 42-64,68

System for displaying and selecting commercials on a television receiver (teleshopping).

7. Claim : 69

System for recording a digitally transmitted television signal on an analogue cassette recorder.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/GB 98/ 03140

Box III TEXT OF THE ABSTRACT (Continuation of item 5 of the first sheet)

The abstract is modified as follows:

Line 12:

The part beginning with the words "A further feature..." and ending in the words "...analogue connector." (end of text) is deleted.

INTERNATIONAL SEARCH REPORT

International Application No

/GB 98/03140

A. CLASSIFICATION OF SUBJECT MATTER

IPC 6 H04N5/445 H04N5/775 H04N7/173 H04N5/00 H04N5/44

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

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C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5 233 422 A (FUJIMORI YASUHIRO ET AL) 3 August 1993 see abstract see column 3, line 9 - column 4, line 20; figures 1-3 ---	1-4
X	US 4 528 585 A (BOLGER THOMAS V) 9 July 1985 see column 1, line 1 - line 49 see column 2, line 5 - line 49; figure 1 ---	1-5
X	PATENT ABSTRACTS OF JAPAN vol. 097, no. 010, 31 October 1997 & JP 09 163260 A (SONY CORP), 20 June 1997 see abstract --- -/--	1-3



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

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"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

"Z" document member of the same patent family

Date of the actual completion of the international search

25 June 1999

Date of mailing of the international search report

19. 07. 99

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Fuchs, P

INTERNATIONAL SEARCH REPORT

International Application No

/GB 98/03140

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	PATENT ABSTRACTS OF JAPAN vol. 098, no. 010, 31 August 1998 & JP 10 133643 'A' (SHIMADZU CORP), 22 May 1998 see abstract	1-5
Y	----- PATENT ABSTRACTS OF JAPAN vol. 017, no. 331 (E-1386), 23 June 1993 & JP 05 037873 'A' (SANYO ELECTRIC CO LTD), 12 February 1993 see abstract	1-5
Y	----- PATENT ABSTRACTS OF JAPAN vol. 017, no. 380 (E-1399), 16 July 1993 & JP 05 064161 'A' (HITACHI LTD; OTHERS: 01), 12 March 1993 see abstract	1-4
A	----- WO 91 19378 'A' (THOMSON CONSUMER ELECTRONICS) 12 December 1991 see the whole document	1-4
A	----- PATENT ABSTRACTS OF JAPAN vol. 011, no. 007 (E-469), 9 January 1987 & JP 61 182381 'A' (MATSUSHITA ELECTRIC IND CO LTD), 15 August 1986 see abstract	1,4
A	----- GB 2 305 325 A (HYUNDAI ELECTRONICS AMERICA ; ODEUM MICROSYSTEMS INC (US)) 2 April 1997 see the whole document	1-5
A	----- DE 21 33 066 A (BOSCH FERNSEHANLAGEN) 11 January 1973	
X	----- WO 97 48230 A (STARSIGHT TELECAST INC) 18 December 1997 see page 2, line 10 - page 3, line 11 see page 6, line 13 - line 24; figure 1 see page 16, line 16 - page 23, line 29; figures 7-12	17-20, 24,29, 31-33
A	----- US 5 223 924 A (STRUBBE HUGO J) 29 June 1993 see column 1, line 55 - column 2, line 15; figures 1-5 see column 5, line 33 - column 6, line 33 ----- -/--	17-19, 22,24, 31-34

INTERNATIONAL SEARCH REPORT

International Application No.

/GB 98/03140

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 410 344 A (BARKER ALVA C ET AL) 25 April 1995 see column 1, line 67 - column 2, line 40 see column 4, line 22 - line 51; figure 2 see column 7, line 55 - line 65 ---	17-19, 31,32,34
A	US 5 697 079 A (SPIVEY RONNY) 9 December 1997 see abstract see column 1, line 44 - column 2, line 20; figures 1,5 ---	35,36
A	PATENT ABSTRACTS OF JAPAN vol. 009, no. 115 (E-315), 18 May 1985 & JP 60 005686 A (MATSUSHITA DENKI SANGYO KK), 12 January 1985 see abstract ---	35,38
A	PATENT ABSTRACTS OF JAPAN vol. 097, no. 005, 30 May 1997 & JP 09 016800 A (FUJI ELECTRIC CO LTD), 17 January 1997 see abstract ---	35,39,40
A	FR 2 712 714 A (BOULAY JEAN MARIE) 24 May 1995 see the whole document ---	35
X	WO 97 49242 A (HUNWICH KEITH ;SCHEIN STEVEN (US); ALBA THERESA (US); FOLKER DAVID) 24 December 1997 see page 9, line 24 - page 10, line 29 A see page 19, line 21 - page 20, line 6; claims 1,7,21; figure 4A ---	42,43, 48,63
X	US 5 233 423 A (JERNIGAN FOREST E ET AL) 3 August 1993 A see column 1, line 29 - column 2, line 15; figures 1-2E ---	42,43, 45,63,64 47,48, 51,59,61
X	FR 2 726 717 A (LACROSSE PHILIPPE) 10 May 1996 A see page 4, line 1 - page 5, line 25; figures 1,2 see page 2, line 27 - page 3, line 17 ---	42,43, 45,47, 48,59,63 49,51
A	EP 0 785 675 A (TOKYO SHIBAURA ELECTRIC CO) 23 July 1997 see abstract; figure 1 ---	69
A	EP 0 726 574 A (MATSUSHITA ELECTRIC IND CO LTD) 14 August 1996 see column 1, line 1 - line 51; figure 16 ---	69

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INTERNATIONAL SEARCH REPORT

International Application No

/GB 98/03140

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	PATENT ABSTRACTS OF JAPAN vol. 097, no. 011, 28 November 1997 & JP 09 186969 A (VICTOR CO OF JAPAN LTD), 15 July 1997 see abstract -----	69

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

/GB 98/03140

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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		AU 8072591 A	31-12-1991
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		AU 8083991 A	31-12-1991
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		AU 8087191 A	31-12-1991
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		DE 69127897 T	05-03-1998
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PCTWORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶: H04N 5/445, 5/775, 7/173, 5/00, 5/44	A1	(11) International Publication Number: WO 00/10327 (43) International Publication Date: 24 February 2000 (24.02.00)
(21) International Application Number: PCT/GB98/03140 (22) International Filing Date: 21 October 1998 (21.10.98) (30) Priority Data: 9817421.2 11 August 1998 (11.08.98) GB (71) Applicant (for all designated States except US): DANMERE LIMITED [GB/GB]; Whitehall, 75 School Lane, Hartford, Northwich, Cheshire CW8 1PF (GB). (72) Inventor; and (75) Inventor/Applicant (for US only): AUSTIN, Kenneth [GB/GB]; Weaverham Grange, 7 Beechwood Avenue, Hartford, Northwich, Cheshire CW8 3AR (GB). (74) Agent: ROYSTONS; Tower Building, Water Street, Liverpool, Merseyside L3 1BA (GB).		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i>
(54) Title: INTERACTIVE TELEVISION CONTROL/OPERATING SYSTEM (57) Abstract An interactive television control/operating system for displaying moving pictures from a live television program or a recorded or pre-recorded item intended to be displayed on a television. There is described means operable to enlarge a prescribed area of a displayed picture. Also described is means for capturing a displayed video image, means for selecting the image to be captured and means for storing and/or printing the selected image. Also described is a system for taking a copy of images displayed on a television where said television is displaying a live program in which said images are stored in digital memory on a video segment. Also described is a method of selecting television programmes for viewing based on selecting TV programs based on what is actually watched. Also described is a means of taking audio notes utilising a remote control device operating in conjunction with the television set top box electronics.		

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BF	Burkina Faso	GR	Greece	ML	Mali	TR	Turkey
BG	Bulgaria	HU	Hungary	MN	Mongolia	TT	Trinidad and Tobago
BJ	Benin	IE	Ireland	MR	Mauritania	UA	Ukraine
BR	Brazil	IL	Israel	MW	Malawi	UG	Uganda
BY	Belarus	IS	Iceland	MX	Mexico	US	United States of America
CA	Canada	IT	Italy	NE	Niger	UZ	Uzbekistan
CF	Central African Republic	JP	Japan	NL	Netherlands	VN	Viet Nam
CG	Congo	KE	Kenya	NO	Norway	YU	Yugoslavia
CH	Switzerland	KG	Kyrgyzstan	NZ	New Zealand	ZW	Zimbabwe
CI	Côte d'Ivoire	KP	Democratic People's Republic of Korea	PL	Poland		
CM	Cameroon	KR	Republic of Korea	PT	Portugal		
CN	China	KZ	Kazakhstan	RO	Romania		
CU	Cuba	LC	Saint Lucia	RU	Russian Federation		
CZ	Czech Republic	LI	Liechtenstein	SD	Sudan		
DE	Germany	LK	Sri Lanka	SE	Sweden		
DK	Denmark	LR	Liberia	SG	Singapore		
EE	Estonia						